Claims

1. A rotary edging wheel for edge finishing of an optical lens comprising:

a hub portion adapted for attachment to a rotary power source;

an outer circumferential cutting surface having a width, said surface including an abrasive grit attached thereto;

a radially extending planar side portion;

at least one swarf clearing groove extending at an angle at least across a part of said surface; and

an opening into said planar side for removal of swarf out through said planar side.

2. The bevel edging wheel of claim 1 further comprising a plurality of said swarf clearing slots formed in said circumferential cutting surface.

3. The bevel edging wheel of claim 1 wherein said swarf clearing slot extends along a portion of the cutting surface.

4. The bevel edging wheel of claim 1 wherein said swarf clearing slot extends along the entire length of said cutting surface.

5. The bevel edging wheel of claim 1 wherein said slot has an angle of from about 10 degrees to about 80 degrees.

6. The bevel edging wheel of claim 1 wherein said slot has an angle of from about 15 degrees to about 65 degrees.

7. The bevel edging wheel of claim 1 wherein said slot has an angle of from about 35 degrees to about 45 degrees.

8. The bevel edging wheel of claim 1 wherein the abrasive grit is attached to the wheel by brazing, electroplating, sintering or resin bonding.

9. The bevel edging wheel of claim 8 wherein said abrasive grit is a diamond hardness grit.

Sub A3 10. A rotary bevel edging wheel for edge finishing of an optical lens comprising:

a hub portion adapted for attachment to a rotary power source;

an outer circumferential cutting surface having a width, said surface including an abrasive grit attached thereto, and having a circumferential groove therein for forming an edge contour onto an optical lens;

a radially extending planar side portion;

a plurality of at least one swarf clearing grooves extending at an angle at least across said circumferential groove; and

an opening into said planar side for removal of swarf out through said planar side.

11. The bevel edging wheel of claim 10 wherein said swarf clearing slot extends along the entire length of said cutting surface.

12. The bevel edging wheel of claim 10 wherein said slot has an angle of from about 10 degrees to about 80 degrees.

13. The bevel edging wheel of claim 10 wherein said slot has an angle of from about 15 degrees to about 65 degrees.

14. The bevel edging wheel of claim 10 wherein said slot has an angle of from about 35 degrees to about 45 degrees.

15. The bevel edging wheel of claim 10 wherein the abrasive grit is attached to the wheel by brazing, electroplating, sintering or resin bonding.

16. The bevel edging wheel of claim 15 wherein said abrasive grit is a diamond hardness grit.

SUB A4 17. A rotary bevel edging wheel for edge finishing of an optical lens comprising:

a hub portion adapted for attachment to a rotary power source;

an outer circumferential cutting surface having a width, said surface including an abrasive grit attached thereto, and having a circumferential groove therein for forming an edge contour onto an optical lens;

a radially extending planar side portion;

a plurality of swarf clearing grooves extending across the width of said outer circumferential cutting surface, at an angle of from about 35 to about 45 degrees to said planar side portion; and

an opening into said planar side for removal of swarf out through said planar.

18. The bevel edging wheel of claim 17 wherein the abrasive grit is attached to the wheel by brazing, electroplating, sintering or resin bonding.

19. The bevel edging wheel of claim 18 wherein said abrasive grit is a diamond hardness abrasive grit.

20. The bevel edging wheel of claim 17, wherein said abrasive grit is a diamond grit material having a mesh of from about 5-10 microns to about 100-120 mesh.